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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,289	04/08/2004	Jeffrey B. Feldstein	CSCO-8557	1113

7590 07/18/2006  
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EXAMINER

THORNEWELL, KIMBERLY A

ART UNIT	PAPER NUMBER
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2128

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/821,289	<b>Applicant(s)</b> FELDSTEIN ET AL.	
	<b>Examiner</b> Kimberly Thornewell	<b>Art Unit</b> 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br/> Paper No(s)/Mail Date _____.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)<br/> Paper No(s)/Mail Date _____.</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____.</p> |
|---|--|

## **DETAILED ACTION**

Claims 1-30 are pending in the instant application.

### ***Oath/Declaration***

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because it does not identify the citizenship of each inventor.

### ***Claim Interpretation***

The claimed "personalities" are interpreted to be an object identifier, as described in the disclosure, page 12 lines 20-23.

### ***Specification***

The use of the trademark CiscoWorks has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### ***Claim Objections***

Claims 3, 4, 13, 14, 21, 23 and 24 are objected to because of the following informalities:

The preamble of claims 3, 4, 13, 14, 23 and 24 should read, "...wherein the device attributes *comprise*..."

The preamble of claim 21 should read, "A system for generating a simulated network, the *system* comprising..."

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-7 and 9-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Independent claim 1 is directed to a method for generated a simulated network. According to the claim, once the method is performed, the result obtained is a build file, which is generated based on a network discovery database. Because the build file is not stored or made available for use through a form of conveyance, the method lacks a tangible result. Dependent claims 2-7 and 9-10 do not overcome the rejection because they merely clarify the steps as to how the method is performed, as opposed to making available for use the generated build file. Dependent claim 8 reads, "...the build file is made for use by a network

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management simulator to simulate a network," thus implying that the result obtained from the method of claim 1 is meant to be tangible. However, because this limitation is not recited in the independent claim, claim 1, and all other claims dependent therefrom, are assumed to be non-statutory.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Tyan, "Design, Realization and Evaluation of a Component-Based Compositional Software Architecture for Network Simulation," a doctoral dissertation submitted to the Graduate School at Ohio State University, 2002.

**As per claims 1, 11 and 21,**

Tyan discloses a method, computer-usable medium, and system for generating a simulated network, comprising:

**Accessing a network discovery database for a managed network**

(taught as the ability to access components while constructing network simulation scenarios, page 108 section 7.3 lines 1-4), wherein the network discovery database comprises **device information** and **connectivity information** for a

**plurality of devices** of the managed network (page 14 section 2.2 paragraph 2 lines 3-7); and

**Automatically generating a build file** describing the simulated network based on the network discovery database (page 122 figure 7.2, shown as how the NodeBuilder behaves).

**As per claims 2, 12 and 22,**

Tyan discloses the automatic generation of the build file comprising:

**Extracting device attributes** for the devices of the managed network and **writing the device attributes to the build file** (page 146 lines 2-5); and

**Determining personalities** for the devices based on the device attributes and **writing the personalities to the build file** (page 55 first paragraph).

**As per claims 3, 13 and 23,**

Tyan discloses the device attributes comprising: a **device type** (page 15, taught as basic and composite components), **network connectivity information** (page 14 section 2.2 paragraph 2 lines 3-7), a **device configuration** (page 33 section 3.5 lines 1-4) and a **device operating system name and version** (page 149 last paragraph, taught as all devices running in Linux 2.4.8).

**As per claims 4, 14 and 24,**

Tyan discloses the determining personalities for the devices comprising:

**Determining whether a personality exists for a device** based on the device type and the operating system of the device (page 53 under "Identities Query");

**If the personality exists, selecting the personality** (page 52, taught as "Identity Retrieval"); and

**If the personality does not exist, creating a personality for the device** (page 53, taught as "Identity Addition").

**As per claims 5, 15 and 25,**

Tyan discloses the creating the personality for the device comprising **selecting a personality from existing personalities** based on the device type and the device operating system name and version (page 53 under "Identities Query").

**As per claims 6, 16 and 26,**

Tyan discloses the determining personalities for the devices comprising **attaching the device attributes for the device to the personality** (page 64 first paragraph).

**As per claims 7, 17 and 27,**

Tyan discloses the network connectivity information comprising **a neighbor discovery protocol table** for the device (page 52 table 5.4).

**As per claims 8, 18 and 28,**

Tyan discloses the **build file being for use by a network management simulator to simulate a network** (page 42 second full paragraph).

**As per claims 9, 19 and 29,**

Tyan discloses the **device attributes comprising event information** (page 34 last paragraph).

**As per claims 10, 20 and 30,**

Tyan discloses the generation of the build file further comprising configuring the event information for the devices (page 59, under "Unicast/Multicast Route Events").

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

"Advances in Network Simulation," by Breslau et al., published by IEEE in May 2000, discusses the features of network simulators, including the use of databases in creating a network simulation environment.

"Comparison of Network Simulators Revisited," by Nicol, published by Dartmouth college in May 2002, compares the JavaSim (as discussed in the Tyan reference) with ns2 and SSFNet, two other network simulators.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly Thornevell whose telephone number is (571)272-6543. The examiner can normally be reached on 8am-4:30pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on (571)272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimberly A. Thornevell  
Patent Examiner  
Art Unit 2128

  
KAMINI SHAH  
SUPERVISORY PATENT EXAMINER

KAT